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Federal Grain Inspection Service

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United States Standards for Rice

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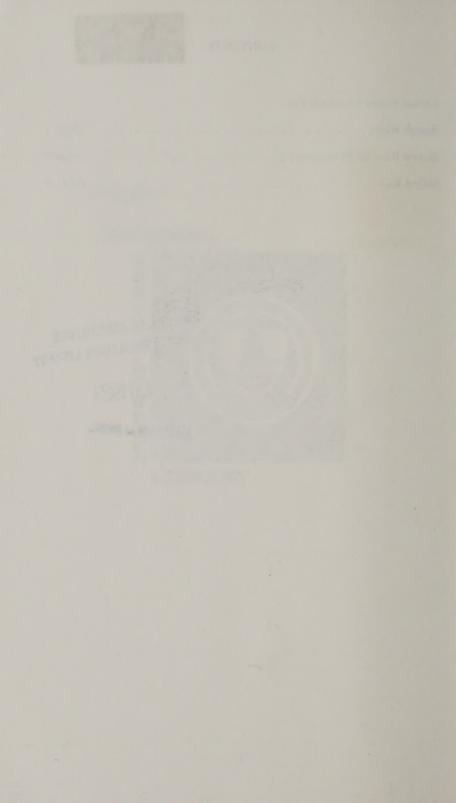
CONTENTS

United States Standards For:
Rough Rice
Brown Rice for Processing
Milled Rice

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UNITED STATES STANDARDS FOR ROUGH RICE 1/

TERMS DEFINED

§ 68.201 Definition of rough rice.

Rice (Oryza sativa L.) which consists of 50.0 percent or more of paddy kernels (see § 68.202(i)) of rice.

§ 68.202 Definition of other terms.

For the purposes of these standards, the following terms shall have the meanings stated below:

- (a) <u>Broken kernels</u>. Kernels of rice which are less than three-fourths of whole kernels.
- (b) Chalky kernels. Whole or large broken kernels of rice which are one-half or more chalky.
 - (c) Classes. The following four classes:

Long Grain Rough Rice Medium Grain Rough Rice Short Grain Rough Rice Mixed Rough Rice

Classes shall be based on the percentage of whole kernels, large broken kernels, and types of rice.

- (1) "Long grain rough rice" shall consist of rough rice which contains more than 25.0 percent of whole kernels and which, after milling to a well-milled degree, contains not more than 10.0 percent of whole or large broken kernels of medium- or short-grain rice.
- (2) "Medium grain rough rice" shall consist of rough rice which contains more than 25.0 percent of whole kernels and which, after milling to a well-milled degree, contains not more than 10.0 percent of whole or large broken kernels of long-grain rice or whole kernels of short-grain rice.
- (3) "Short grain rough rice" shall consist of rough rice which contains more than 25.0 percent of whole kernels and which, after milling to a well-milled degree, contains not more than 10.0 percent of whole or large broken kernels of long-grain rice or whole kernels of medium-grain rice.

^{1/} Compliance with the provisions of these standards does not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal laws.

- (4) "Mixed rough rice" shall consist of rough rice which contains more than 25.0 percent of whole kernels and which, after milling to a well-milled degree, contains more than 10.0 percent of "other types" as defined in paragraph (h) of this section.
- (d) <u>Damaged kernels</u>. Whole or large broken kernels of rice which are distinctly discolored or damaged by water, insects, heat, or any other means, and whole or large broken kernels of parboiled rice in nonparboiled rice. "Heat-damaged kernels" (see paragraph (e) of this section) shall not function as damaged kernels.
- (e) Heat-damaged kernels. Whole or large broken kernels of rice which are materially discolored and damaged as a result of heating, and whole or large broken kernels of parboiled rice in nonparboiled rice which are as dark as, or darker in color than, the interpretive line for heat-damaged kernels.
- (f) Milling yield. An estimate of the quantity of whole kernels and total milled rice (whole and broken kernels combined) that are produced in the milling of rough rice to a well-milled degree.
- (g) Objectionable seeds. Seeds other than rice, except seeds of Echinochloa crusgalli (commonly known as barnyard grass, watergrass, and Japanese millet).
- (h) Other types. (1) Whole kernels of: (i) Long-grain rice in medium- or short-grain rice, (ii) medium-grain rice in long- or short-grain rice, (iii) short-grain rice in long- or medium-grain rice, and (2) Large broken kernels of long-grain rice in medium- or short-grain rice and large broken kernels of medium- or short-grain rice in long-grain rice.

NOTE: Large broken kernels of medium-grain rice in short-grain rice and large broken kernels of short-grain rice in medium-grain rice shall not be considered other types.

- (i) Paddy kernels. Whole or broken unhulled kernels of rice.
- (j) <u>Red rice</u>. Whole or large broken kernels of rice on which there is an appreciable amount of red bran.
 - (k) Seeds. Whole or broken seeds of any plant other than rice.
- (l) <u>Smutty kernels</u>. Whole or broken kernels of rice which are distinctly infected by smut.
 - (m) Types of rice. The following three types:

Long grain Medium grain Short grain Types shall be based on the length/width ratio of kernels of rice that are unbroken and the width, thickness, and shape of kernels of rice that are broken as set forth in the Rice Inspection Handbook 2/.

- (n) <u>Ungelatinized kernels</u>. Whole or large broken kernels of parboiled rice with distinct white or chalky areas due to incomplete gelatinization of the starch.
- (0) Whole and large broken kernels. Rice (including seeds) that are (1) passes over a 6 plate (for southern production), or (2) remains on top of a 6 sieve (for western production).
- (p) Whole kernels. Unbroken kernels of rice and broken kernels of rice which are at least three-fourths of an unbroken kernel.
- (q) 6 sieve. A metal sieve 0.032-inch thick, perforated with rows of round holes 0.0938 (6/64) inch in diameter.
- (r) 6 plate. A laminated metal plate 0.142-inch thick, with a top lamina 0.051-inch thick, perforated with rows of round holes 0.0938 (6/64) inch in diameter, and a bottom lamina 0.091-inch thick, without perforations.

PRINCIPLES GOVERNING APPLICATION OF STANDARDS

§ 68.203 Basis of determination.

The determination of seeds, objectionable seeds, heat-damaged kernels, red rice and damaged kernels, chalky kernels, other types, color, and the special grade Parboiled rough rice shall be on the basis of the whole and large broken kernels of milled rice that are produced in the milling of rough rice to a well-milled degree. When determining class, the percentage of (a) whole kernels of rough rice shall be determined on the basis of the original sample, and (b) types of rice shall be determined on the basis of the whole and large broken kernels of milled rice that are produced in the milling of rough rice to a well-milled degree. Smutty kernels shall be determined on the basis of the rough rice after it has been cleaned and shelled as set forth in the Rice Inspection Handbook 2/, or by any method that is approved by the Administrator as giving equivalent results 3/. All other determinations shall be on the basis of the original sample. Mechanical sizing of kernels shall be adjusted by handpicking as set forth in the Rice Inspection Handbook 2/, or by any method that is approved by the Administrator as giving equivalent results 3/.

- 2/ Publications referenced in these standards will be made available upon request to the Federal Grain Inspection Service, U.S. Department of Agriculture, 1400 Independence Avenue, S.W., Washington, D.C. 20250
- 3] Requests for information concerning approved devices and procedures, criteria for approved devices, and requests for approval of devices should be directed to the Federal Grain Inspection Service, U.S. Department of Agriculture, 1400 Independence Avenue, S.W., Washington, D.C. 20250.

§ 68.204 Temporary modifications in equipment and procedures.

The equipment and procedures referred to in the rough rice standards are applicable to rice produced and harvested under normal environmental conditions. Abnormal environmental conditions during the production and harvest of rice may require minor temporary modifications in the equipment or procedures to obtain results expected under normal conditions. When these adjustments are necessary, Field Offices, official inspection agencies, and interested parties in the rice industry will be notified promptly in writing of the modification. These modifications shall not include changes in interpretations of identity, class, quality, or condition.

§ 68.205 Interpretive line samples.

Interpretive line samples showing the official scoring line for factors that are determined by visual examinations shall be maintained by the Federal Grain Inspection Service, U.S. Department of Agriculture, and shall be available for reference in all inspection offices that inspect and grade rice.

§ 68.206 Milling requirements.

In determining milling yield (see § 68.202(f)) in rough rice, the degree of milling shall be equal to or better than, that of the interpretive line sample for "well-milled" rice.

§ 68.207 Milling yield determination.

Milling yield shall be determined by the use of an approved device in accordance with procedures prescribed in the Rice Inspection Handbook, and the Equipment Handbook 2/. For the purpose of this paragraph, "approved device" shall include the McGill Miller No. 3 and any other equipment that is approved by the Administrator as giving equivalent results 3/.

NOTE: Milling yield shall not be determined when the moisture content of the rough rice exceeds 18.0 percent.

§ 68.208 Moisture.

Water content in rough rice as determined by an approved device in accordance with procedures prescribed in the Rice Inspection Handbook 2/. For the purpose of this paragraph "approved device" shall include the Motomco Moisture Meter and any other equipment that is approved by the Administrator as giving equivalent results 3/.

§ 68.209 Percentages.

Percentages shall be determined on the basis of weight and shall be rounded off as follows:

- (a) When the figure to be rounded is followed by a figure greater than 5, round to the next higher figure; e.g. 0.46, report as 0.5.
- (b) When the figure to be rounded is followed by a figure less than 5, round to the next lowest figure; e.g., 0.54, report as 0.5.
- (c) When the figure to be rounded is followed by the figure 5, round to the nearest even figure; e.g., 0.45, report as 0.4; 0.55, report as 0.6.

All percentages, except for milling yield, shall be stated in whole and tenth percent to the nearest tenth percent. Milling yield shall be stated to the nearest whole percent.

GRADES, GRADE REQUIREMENTS, AND GRADE DESIGNATIONS

§ 68.210 Grades and grade requirements for the classes of rough rice. (See also § 68.212.)

			Color requirements <u>1</u> /		Shall be white or creamy. May be slightly gray. May be light gray. May be gray or slightly rosy. May be dark gray or rosy. May be dark gray or rosy.	U.S. Sample grade shall be rough rice which: (a) does not meet the requirements for any of the grades from U.S. No. 1 to U.S. No. 6, inclusive; (b) contains more than 14.0 percent of moisture; (c) is musty, or sour, or heating; (d) has any commercially objectionable foreign odor; or (e) is otherwise of distinctly low quality.
			Other types 2/	Percent	10.00	oes not mee; (b) conta s any comme
	Maximum limits of	rnels 1/	In medium or short grain rice	Percent	2.0 4.0 6.0 8.0 10.0	lch: (a) d inclusive Ing; (d) ha low quality
		Chalky kernels 1/	In long grain rice	Percent	1.0	eth rice whi U.S. No. 6 r, or heat istinctly
			Red rice and damaged kernels (singly or com- bined	Percent	0.5 1.5 4.0 6.0 15.0 3/	U.S. Sample grade shall be rough rice which: (a) do the grades from U.S. No. 1 to U.S. No. 6, inclusive; moisture; (c) is musty, or sour, or heating; (d) has odor; or (e) is otherwise of distinctly low quality.
		d heat- kernels	Heat— Red ric damaged and kernels damaged and objec— kernels tionable (singly or com- (singly or bined	Number in 500 grams	22 32 73 75	ses from U.S. (c) is mu.
		Seeds and heat-damaged kernels	Total (singly or com- bined)	Number in 500 grams	ц 10 27 37 75	U.S. Samp the grade moisture odor; or
			Grade		U.S. No. 2 U.S. No. 3 U.S. No. 3 U.S. No. 5 U.S. No. 6	grade grade

^{1/} For the special grade Parbolled rough rice, see § 68.212(a). These limits do not apply to the class Mixed Rough Rice. $\overline{2}/$ These limits do not apply to the class Mixed Fough Rice. $\overline{3}/$ Rice in grade U.S. No. 6 shall contain not more than 6.0 percent of damaged kernels.

§ 68.211 Grade designation.

- (a) The grade designation for all classes of rough rice, except Mixed Rough Rice, shall include in the following order: (1) The letters "U.S."; (2) the number of the grade or the words "Sample grade," as warranted; (3) the words "or better" when applicable and requested by the applicant prior to inspection; (4) the class; (5) each applicable special grade (see § 68.213); and (6) a statement of the milling yield.
- (b) The grade designation for the class Mixed Rough Rice shall include, in the following order: (1) The letters "U.S."; (2) the number of the grade or the words "Sample grade," as warranted; (3) the words "or better," when applicable and requested by the applicant prior to inspection; (4) the class; (5) each applicable special grade (see S 68. 213); (6) the percentage of whole kernels of each type in the order or predominance; (7) the percentage of large broken kernels of each type in the order of predominance; (8) the percent of material removed by the No. 6 sieve or the No. 6 sizing plate; (9) when applicable, the percentage of seeds; and (10) a statement of the milling yield.

NOTE: Large broken kernels other than long grain, in Mixed Rough Rice, shall be certificated as "medium or short grain."

SPECIAL GRADES, SPECIAL GRADE REQUIREMENTS, AND SPECIAL GRADE DESIGNATIONS

§ 68.212 Special grades and requirements.

A special grade, when applicable, is supplemental to the grade assigned under § 68.210. Such special grades for Rough Rice are established and determined as follows:

(a) Parboiled rough rice. Parboiled rough rice shall be rough rice in which the starch has been gelatinized by soaking, steaming, and drying. Grades U.S. No. 1 to U.S. No. 6 inclusive, shall contain not more than 10.0 percent of ungelatinized kernels. Grades U.S. No. 1 and U.S. No. 2 shall contain not more than 0.1 percent, grades U.S. No. 3 and U.S. No. 4 not more than 0.2 percent, and grades U.S. No. 5 and U.S. No. 6 not more than 0.5 percent of nonparboiled rice. If the rice is: (1) Not distinctly colored by the parboiling process, it shall be considered "Parboiled Light"; (2) distinctly but not materially colored by the parboiling process, it shall be considered "Parboiled"; (3) materially colored by the parboiling process, it shall be considered "Parboiled Dark." The color levels for "Parboiled Light," "Parboiled" and "Parboiled Dark" rice shall be in accordance with the interpretive line samples for parboiled rice.

NOTE: The maximum limits for "Chalky kernels," "Heat-damaged kernels." "Kernels damaged by heat," and the "Color requirements" shown in § 68.210 are not applicable to the special grade "Parboiled rough rice."

(b) Smutty rough rice. Smutty rough rice shall be rough rice which contains more than 3.0 percent of smutty kernels.

(c) Weevily rough rice. Weevily rough rice shall be rough rice which is infested with live weevils or other live insects injurious to stored rice.

§ 68.213 Special grade designation.

The grade designation for parboiled, smutty, or weevily rough rice shall include, following the class, the word(s) "Parboiled Light," "Parboiled," "Parboiled Dark," "Smutty," or "Weevily," as warranted, and all other information prescribed in § 68.211.

U.S. STANDARDS FOR BROWN RICE FOR PROCESSING 1/

TERMS DEFINED

§ 68.251 Definition of brown rice for processing.

Rice (Oryza: sativa L.) which consists of more than 50.0 percent of kernels of brown rice, and which is intended for processing to milled rice.

§ 68.252 Definition of other terms.

For the purposes of these standards, the following terms shall have the meanings stated below:

- (a) Broken kernels. Kernels of rice which are less than three-fourths of whole kernels.
- (b) Brown rice. Whole or broken kernels of rice from which the hulls have been removed.
- (c) Chalky kernels. Whole or broken kernels of rice which are one-half or more chalky.
 - (d) <u>Classes</u>. There are four classes of brown rice for processing.

 Long Grain Brown Rice for Processing.

 Medium Grain Brown Rice for Processing.

 Short Grain Brown Rice for Processing.

 Mixed Brown Rice for Processing.

Classes shall be based on the percentage of whole kernels, broken kernels, and types of rice.

- (1) "Long-grain brown rice for processing" shall consist of brown rice for processing which contains more than 25.0 percent of whole kernels of brown rice and not more than 10.0 percent of whole or broken kernels of medium- or short-grain rice.
- (2) "Medium-grain brown rice for processing" shall consist of brown rice for processing which contains more than 25.0 percent of whole kernels of brown rice and not more than 10.0 percent of whole or broken kernels of long-grain rice or whole kernels of short-grain rice.

^{1/} Compliance with the provisions of these standards does not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal laws.

- (3) "Short-grain brown rice for processing" shall consist of brown rice for processing which contains more than 25.0 percent of whole kernels of brown rice and not more than 10.0 percent of whole or broken kernels of long-grain rice or whole kernels of medium-grain rice.
- (4) "Mixed brown rice for processing" shall be brown rice for processing which contains more than 25.0 percent of whole kernels of brown rice and more than 10.0 percent of "other types" as defined in paragraph (i) of this section.
- (e) <u>Damaged kernels</u>. Whole or broken kernels of rice which are distinctly discolored or damaged by water, insects, heat, or any other means (including parboiled kernels in nonparboiled rice and smutty kernels). "Heat-damaged kernels" [see paragraph (f) of this section] shall not function as damaged kernels.
- (f) Heat-damaged kernels. Whole or broken kernels of rice which are materially discolored and damaged as a result of heating and parboiled kernels in nonparboiled rice which are as dark as, or darker in color than, the interpretative line for heat-damaged kernels.
- (g) Milling yield. An estimate of the quantity of whole kernels and total milled rice (whole and broken kernels combined) that is produced in the milling of brown rice for processing to a well-milled degree.
- (h) Objectionable seeds. Whole or broken seeds other than rice, except seeds of Echinochloa crusgalli (commonly known as barnyard grass, watergrass, and Japanese millet).
- (i) Other types. (1) Whole kernels of: (i) long-grain rice in medium-or short-grain rice, (ii) medium-grain rice in long- or short-grain rice, (iii) short-grain rice in long- or medium-grain rice, and (2) broken kernels of long-grain rice in medium- or short-grain rice and broken kernels of medium- or short-grain rice in long-grain rice.

NOTE: Broken kernels of medium-grain rice in short-grain rice and broken kernels of short-grain rice in medium-grain rice shall not be considered other types.

- (j) Paddy kernels. Whole or broken unhulled kernels and whole or broken kernels of rice having a portion or portions of the hull remaining which cover one-half (½) or more of the whole or broken kernels.
- (k) Red rice. Whole or broken kernels of rice on which the bran is distinctly red in color.

- (l) Related Material. All by-products of a paddy kernel, such as the outer glumes, lemma, palea, awn, embryo, and bran layers.
 - (m) Seeds. Whole or broken seeds of any plant other than rice.
- (n) <u>Smutty kernels</u>. Whole or broken kernels of rice which are distinctly infected by smut.
 - (o) Types of rice. There are three types of brown rice for processing:

Long grain Medium grain Short grain

Types shall be based on the length/width ratio of kernels of rice that are unbroken and the width, thickness, and shape of kernels of rice that are broken as set forth in the Rice Inspection Handbook 2/.

- (p) <u>Ungelatinized kernels</u>. Whole or broken kernels of parboiled rice with distinct white or chalky areas due to incomplete gelantization of the starch.
- (q) <u>Unrelated material</u>. All matter other than rice, related material, and seeds.
- (r) Well-milled kernels. Whole or broken kernels of rice from which the hulls and practically all of the embryos and the bran layers have been removed.
- (s) Whole kernels. Unbroken kernels of rice and broken kernels of rice which are at least three-fourths of an unbroken kernel.
- (t) 6 plate. A laminated metal plate 0.142-inch thick, with a top lamina 0.051-inch thick, perforated with rows of round holes 0.0938 (6/64) inch in diameter, and a bottom lamina 0.091-inch thick, without perforations.
- (u) 6 ½ sieve. A metal sieve 0.032-inch thick, perforated with rows of round holes 0.1016 (6 ½ /64) inch in diameter.

^{2/} Publications referenced in these standards will be made available upon request to the Federal Grain Inspection Service, U.S. Department of Agriculture, 1400 Independence Avenue, S.W., Washington, D.C. 20250.

PRINCIPLES GOVERNING APPLICATION OF STANDARDS

§ 68.253 Basis of determination.

The determination of kernels damaged by heat, heat-damaged kernels, parboiled kernels in nonparboiled rice, and the special grade Parboiled brown rice for processing shall be on the basis of the brown rice for processing after it has been milled to a well-milled degree. All other determinations shall be on the basis of the original sample. Mechanical sizing of kernels shall be adjusted by handpicking as set forth in the Rice Inspection Handbook 2/ or by any method which gives equivalent results.

§ 68.254 Temporary modifications in equipment and procedures.

The equipment and procedures referred to in the brown rice for processing standards are applicable to rice produced and harvested under normal environmental conditions. Abnormal environmental conditions during the production and harvest of rice may require minor temporary modifications in the equipment or procedures to obtain results expected under normal conditions. When these adjustments are necessary, Federal Grain Inspection Service Field Offices, official inspection agencies, and interested parties in the rice industry will be notified promptly in writing of the modification. These modifications shall not include changes in interpretations of identity, class, quality, or condition.

§ 68.255 Broken kernels determinations.

Broken kernels shall be determined by the use of equipment and procedures set forth in the Rice Inspection Handbook 2/ or by any method which gives equivalent results.

§ 68.256 Interpretive line samples.

Interpretive line samples showing the official scoring line for factors that are determined by visual observation shall be maintained by the Federal Grain Inspection Service, U.S. Department of Agriculture, and shall be available for reference in all inspection offices that inspect and grade rice.

§ 68.257 Milling requirements

In determining milling yield [see § 68.252 (g)] in brown rice for processing, the degree of milling shall be equal to, or better than, that of the interpretive line sample for "well-milled" rice.

§ 68.258 Milling yield determination.

Milling yield shall be determined by the use of an approved device in accordance with procedures prescribed in the Rice Inspection Handbook 2/ and the Equipment Handbook 2/. For the purpose of this paragraph, "approved device" shall include the McGill Miller No. 3 and any other equipment that is approved by the Administrator as giving equivalent results 3/.

NOTE: Milling yield shall not be determined when the moisture content of the brown rice for processing exceeds 18.0 percent.

§ 68.259 Moisture.

Water content in brown rice for processing as determined by an approved device in accordance with procedures prescribed in the Rice Inspection Handbook 2/. For the purpose of this paragraph, "approved device" shall include the Motomco Moisture Meter and any other equipment that is approved by the Administrator as giving equivalent results 3/.

§ 68.260 Percentages.

Percentages shall be determined on the basis of weight and shall be rounded off as follows:

- (a) When the figure to be rounded is followed by a figure greater than 5, round to the next higher figure; e.g., 0.46, report as 0.5.
- (b) When the figure to be rounded is followed by a figure less than 5, round to the next lowest figure; e.g., 0.54, report as 0.5.
- (c) When the figure to be rounded is followed by the figure 5, round to the nearest even figure; e.g., 0.45, report as 0.4; 0.55, report as 0.6.

All percentages, except for milling yield, shall be stated in whole and tenth percent to the nearest tenth percent. Milling yield shall be stated to the nearest whole percent.

^{3/} Requests for information concerning approved devices and procedures, criteria for approved devices, and request for approval of devices should be directed to the Federal Grain Inspection Service, U.S. Department of Agriculture, 1400 Independence Avenue, S.W., Washington, D.C. 20250.

GRADES, GRADE REQUIREMENTS, AND GRADE DESIGNATIONS

§ 68.261 Grade and grade requirements for the classes of brown rice for processing. (See also § 68.263.)

					Ma:	Maximum limits of	jo			
						Red		Broken		
			Seeds an	Seeds and heat-damaged kernels	naged	rice and		Removed by a 6		
			Total			kernels		plate or		
Grade	Paddy Kernels	slar	(singly	Heat-	Objec-	(singly	Chalky	a 6½	Other	Well-
			or com-	damaged	tionable	or com-	Kernels	sieve	Types	Milled
			bined)	kernels	seeds	bined)	1/	2/	3/	Kernels
	4	Number	Number	Number	Number					
		in 500	1n 500	in 500	in 500					
	Percent g	grams	grams	grams	grams	Percent	Percent	Percent	Percent	Percent
		0		,	c	,	(,	,	,
No.	-	707	10	1	7	1.0	2.0	1.0	1.0	1.0
No.	2.0	1	40	2	10	2.0	4.0	2.0	2.0	3.0
U.S. No. 3	2.0	1	70	7	20	4.0	0.9	3.0	5.0	10.0
U.S. No. 4	2.0		100	8	35	8.0	8.0	4.0	10.0	10.0
U.S. No. 5	2.0	1	150	1.5	20	15.0	15.0	0.9	10.0	10.0
U.S. Sample	_		-							
grade	U.S. Samp	ole gra	de shall be	brown ric	se for proc	U.S. Sample grade shall be brown rice for processing which (a) does not meet the requirements for	(a) does no	t meet the r	equirements	for
	any of th	ne grad	es from U.S	3. No. 1 to	ON .S. No.	any of the grades from U.S. No. 1 to U.S. No. 5, inclusive; (b) contains more than 14.5 percent of	(b) contai	ns more than	14.5 perce	ent of
	moisture	(c) i	s musty, or	sour, or	heating; (moisture; (c) is musty, or sour, or hearing; (d) has any commercially objectionable foreign odor;	nmercially	objectionabl	e foreign c	dor;
	meterial.	OIII SIITE	re than 0.2	percent o	or other 1	(e) Contains mole time to a percent of terated material of more final oil percent of districtions of districtions of the contains many of the contains many contains and the contains of the c	or (a) 46 o	r percent or	dictingtly	100
	marei iai,	7 (1)	חוורשדוווט דדי	e weevits	100000	tve misects,	n et (8) 10	רווכו אזפכ חז	distinctly	*O1
	duartey.									

Plates should be used for southern production rice and sieves should be used for western production rice, but any For the special grade Parboiled brown rice for processing, see § 68.263(a). These limits do not apply to the class Mixed Brown Rice for Processing. 1/ For the special grade Parboiled brown rice for processing 2/ Plates should be used for southern production rice and sidevice or method which gives equivalent results may be used.

§ 68.262 Grade designation.

- (a) The grade designation for all classes of brown rice for processing, except Mixed Brown Rice for Processing, shall include in the following order: (1) The letters "U.S."; (2) the number of the grade or the words "Sample grade," as warranted; (3) the words "or better," when applicable and requested by the applicant prior to inspection; (4) the class; and (5) each applicable special grade (see § 68.264).
- (b) The grade designation for the class Mixed Brown Rice for Processing shall include in the following order: (1) The letters "U.S."; (2) the number of the grade or the words "Sample grade," as warranted; (3) the words "or better," when applicable and requested by the applicant prior to inspection; (4) the class; (5) each applicable special grade (see § 68.264); (6) the percentage of whole kernels of each type in the order of predominance; and when applicable; (7) the percentage of broken kernels of each type in the order of predominance; and (8) the percentage of seeds, related material, and unrelated material.

NOTE: Broken kernels other than long grain, in Mixed Brown Rice for Processing, shall be certificated as "medium or short grain."

SPECIAL GRADES, SPECIAL GRADE REQUIREMENTS, AND SPECIAL GRADE DESIGNATIONS

§ 68.263 Special grades and special grade requirements.

A special grade, when applicable, is supplemental to the grade assigned under § 68.262. Such special grades for brown rice for processing are established and determined as follows:

- (a) Parboiled brown rice for processing. Parboiled brown rice for processing shall be rice in which the starch has been gelatinized by soaking, steaming, and drying. Grades U.S. Nos. 1 to 5 inclusive shall contain not more than 10.0 percent of ungelatinized kernels. Grades U.S. No. 1 and U.S. No. 2 shall contain not more than 0.1 percent, grades U.S. No. 3 and U.S. No. 4 not more than 0.2 percent, and grade U.S. No. 5 not more than 0.5 percent of nonparboiled rice.
- NOTE: The maximum limits for "chalky kernels," "Heat-damaged kernels," and "Kernels damaged by heat" shown in § 68.261 are not applicable to the special grade "Parboiled brown rice for processing."
- (b) Smutty brown rice for processing. Smutty brown rice for processing shall be rice which contains more than 3.0 percent of smutty kernels.

§ 68.264 Special grade designation.

The grade designation for parboiled or smutty brown rice for processing shall include, following the class, the word(s) "Parboiled" or "Smutty," as warranted, and all other information prescribed in § 68.262.



U.S. STANDARDS FOR MILLED RICE 1/

TERMS DEFINED

§ 68.301 Definition of milled rice.

Whole or broken kernels of rice (Oryza sativa L.) from which the hulls and at least the outer bran layers have been removed and which contain not more than 10.0 percent of seeds, paddy kernels, or foreign material, either singly or combined.

§ 68.302 Definition of other terms.

For the purposes of these standards, the following terms shall have the meanings stated below:

- (a) Broken kernels. Kernels of rice which are less than three-fourths of whole kernels.
- (b) Brown rice. Whole or broken kernels of rice from which the hulls have been removed.
- (c) <u>Chalky kernels</u>. Whole or broken kernels of rice which are one-half or more chalky.
- (d) <u>Classes</u>. There are seven classes of milled rice. The following four classes shall be based on the percentage of whole kernels, (broken kernels), and types of rice:

Long-Grain Milled Rice Medium-Grain Milled Rice Short-Grain Milled Rice Mixed Milled Rice

The following three classes shall be based on the percentage of whole kernels and of broken kernels of different size:

Second-Head Milled Rice Screenings Milled Rice Brewers Milled Rice

^{1/} Compliance with the provisions of these standards does not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal laws.

- (1) "Long-grain milled rice" shall consist of milled rice which contains more than 25.0 percent of whole kernels of milled rice and in U.S. Nos. 1 through 4 not more than 10.0 percent of whole or broken kernels of medium- or short-grain rice. U.S. No. 5 and U.S. No. 6 long-grain milled rice shall contain not more than 10.0 percent of whole kernels of medium- or short-grain milled rice (broken kernels do not apply).
- (2) "Medium-grain milled rice" shall consist of milled rice which contains more than 25.0 percent of whole kernels of milled rice and in U.S. Nos. 1 through 4 not more than 10.0 percent of whole or broken kernels of long-grain rice or whole kernels of short-grain rice. U.S. No. 5 and U.S. No. 6 medium-grain milled rice shall contain not more than 10.0 percent of whole kernels of long- or short-grain milled rice (broken kernels do not apply).
- (3) "Short-grain milled rice" shall consist of milled rice which contains more than 25.0 percent of whole kernels of milled rice and in U.S. Nos. 1 through 4 not more than 10.0 percent of whole or broken kernels of long-grain rice or whole kernels of medium-grain rice. U.S. No. 5 and U.S. No. 6 short-grain milled rice shall contain not more than 10.0 percent of whole kernels of long- or medium-grain milled rice (broken kernels do not apply).
- (4) "Mixed milled rice" shall consist of milled rice which contains more than 25.0 percent of whole kernels of milled rice and more than 10.0 percent of "other types" as defined in paragraph (i) of this section. U.S. No. 5 and U.S. No. 6 mixed milled rice shall contain more than 10.0 percent of whole kernels of "other types" (broken kernels do not apply).
- (5) "Second-head milled rice" shall consist of milled rice which, when determined in accordance with §§ 68.303 and 68.304, contains:
- (i) Not more than (a) 25.0 percent of whole kernels, (b) 7.0 percent of broken kernels removed by a 6 plate, (c) 0.4 percent of broken kernels removed by a 5 plate, and (d) 0.05 percent of broken kernels passing through a 4 sieve (southern production); or
- (ii) Not more than (a) 25.0 percent of whole kernels, (b) 50.0 percent of broken kernels passing through a 6½ sieve, and (c) 10.0 percent of broken kernels passing through a 6 sieve (western production).
- (6) "Screenings milled rice" shall consist of milled rice which, when determined in accordance with §§ 68.303 and 68.304, contains:
- (i) Not more than (a) 25.0 percent of whole kernels, (b) 10.0 percent of broken kernels removed by a 5 plate, and (c) 0.2 percent of broken kernels passing through a 4 sieve (southern production); or
- (ii) Not more than (a) 25.0 percent of whole kernels (b) 15.0 percent of broken kernels passing through a 5½ sieve; and more than (c) 50.0 percent of broken kernels passing through a 6½ sieve and (d) 10.0 percent of broken kernels passing through a 6 sieve (western production).

- (7) "Brewers milled rice" shall consist of milled rice which, when determined in accordance with §§ 68.303 and 68.304, contains not more than 25.0 percent of whole kernels and which does not meet the kernelsize requirements for the class Second Head Milled Rice or Screenings Milled Rice.
- (e) <u>Damaged kernels</u>. Whole or broken kernels of rice which are distinctly discolored or damaged by water, insects, heat or any other means, and parboiled kernels in nonparboiled rice. "Heat-damaged kernels" [see paragraph (g) of this section] shall not function as damaged kernels.
- (f) <u>Foreign material</u>. All matter other than rice and seeds. Hulls germs, and bran which have separated from the kernels of rice shall be considered foreign material.
- (g) <u>Heat-damaged kernels</u>. Whole or broken kernels of rice which are materially discolored and damaged as a result of heating and parboiled kernels in nonparboiled rice which are as dark as, or darker in color than, the interpretive line for heat-damaged kernels.
- (h) Objectionable seeds. Seeds other than rice, except seeds of Echinochloa crusgalli (commonly known as barnyard grass, watergrass, and Japanese Millet).
- (i) Other types. (1) Whole kernels of: (i) Long-grain rice in medium- or short-grain rice, (ii) Medium-grain rice in long- or short-grain rice, (iii) Short-grain rice in long- or medium-grain rice, and (2) broken kernels of long-grain rice in medium- or short-grain rice and broken kernels of medium- or short-grain rice in long-grain rice, except in U.S. No. 5 and U.S. No. 6 milled rice, only whole kernels will apply.

NOTE: Broken kernels of medium-grain rice in short-grain rice and broken kernels of short-grain rice in medium-grain rice shall not be considered other types.

- (j) Paddy kernels. Whole or broken unhulled kernels of rice; whole or broken kernels of brown rice, and whole or broken kernels of milled rice having a portion or portions of the hull remaining which cover one-eighth (1/8) or more of the whole or broken kernel.
- (k) Red rice. Whole or broken kernels of rice on which there is an appreciable amount of red bran.
 - (1) Seeds. Whole or broken seeds of any plant other than rice.
 - (m) Types of rice. There are three types of milled rice as follows:

Long grain Medium grain Short grain Types shall be based on the length-width ratio of kernels of rice that are unbroken and the width, thickness, and shape of kernels that are broken, as set forth in the Rice Inspection Handbook 2/.

- (n) <u>Ungelatinized kernels</u>. Whole or broken kernels of parboiled rice with distinct white or chalky areas due to incomplete gelatinization of the starch.
- (o) <u>Well-milled kernels</u>. Whole or broken kernels of rice from which the hulls and practically all of the germs and the bran layers have been removed.

NOTE: This factor is determined on an individual kernel basis and applies to the special grade Undermilled milled rice only.

- (p) Whole kernels. Unbroken kernels of rice and broken kernels of rice which are at least three-fourths of an unbroken kernel.
- (q) 5 plate. A laminated metal plate 0.142-inch thick, with a top lamina, 0.051-inch thick, perforated with rows of round holes 0.0781 (5/64) inch in diameter, 5/32 inch from center to center, with each row staggered in relation to the adjacent rows, and a bottom lamina 0.091-inch thick, without perforations.
- (r) 6 plate. A laminated metal plate 0.142-inch thick, with a top lamina 0.051-inch thick, perforated with rows of round holes 0.0938 (6/64) inch in diameter, 5/32 inch from center to center, with each row staggered in relation to the adjacent rows, and a bottom lamina 0.091-inch thick, without perforations.
- (s) $2\frac{1}{2}$ sieve. A metal sieve 0.032-inch thick, perforated with rows of round holes 0.0391 (2 $\frac{1}{2}$ /64) inch in diameter, 0.075-inch from center to center, with each row staggered in relation to the adjacent rows.
- (t) 4 sieve. A metal sieve 0.032-inch thick, perforated with rows of round holes 0.0625 (4/64) inch in diameter, 1/8 inch from center to center, with each row staggered in relation to the adjacent rows.
- (u) 5 sieve. A metal sieve 0.032-inch thick, perforated with rows of round holes 0.0781 (5/64) inch in diameter, 5/32 inch from center to center, with each row staggered in relation to the adjacent rows.

^{2/} Publications referenced in these standards will be made available upon request to the Federal Grain Inspection Service, U.S. Department of Agriculture, 1400 Independence Avenue, S.W., Washington, D.C. 20250.

- (v) 5½ sieve. A metal sieve 0.032-inch thick, perforated with rows of round holes 0.0859 (5½/64) inch in diameter, 9/64 inch from center to center, with each row staggered in relation to the adjacent rows.
- (w) $\underline{6}$ sieve. A metal sieve 0.032-inch thick, perforated with rows of round holes 0.0938 (6/64) inch in diameter, 5/32 inch from center to center, with each row staggered in relation to the adjacent rows.
- (x) $6\frac{1}{2}$ sieve. A metal sieve 0.032 inch thick, perforated with rows of round holes 0.1016 $(6\frac{1}{2}/64)$ inch in diameter, 5/32 inch from center to center, with each row staggered in relation to the adjacent rows.
- (y) 30 sieve. A woven wire cloth sieve having 0.0234-inch openings, with a wire diameter of 0.0153 inch, and meeting the specifications of American Society for Testing and Materials Designation E-11-61, as set forth in the Equipment Handbook 2/.

PRINCIPLES GOVERNING APPLICATION OF STANDARDS

§ 68.303 Basis of determination.

All determinations shall be on the basis of the original sample. Mechanical sizing of kernels shall be adjusted by handpicking, as set forth in the Rice Inspection Handbook <u>2</u>/, or by any method which gives equivalent results.

§ 68.304 Temporary modifications in equipment and procedures.

The equipment and procedures referenced to in the milled rice standards are applicable to rice produced and harvested under normal environmental conditions. Abnormal environmental conditions during the production and harvest of rice may require minor temporary modifications in the equipment or procedures to obtain results expected under normal conditions. When these adjustments are necessary, Federal Grain Inspection Service Field Offices, official inspection agencies, and interested parties in the rice industry will be notified promptly in writing of the modification. These modifications shall not include changes in interpretations of identity, class, quality, or condition.

§ 68.305 Broken kernels determination.

Broken kernels shall be determined by the use of equipment and procedures set forth in the Rice Inspection Handbook $\underline{2}$ /, or by any method which gives equivalent results.

§ 68.306 Interpretive line samples.

Interpretive line samples showing the official scoring line for factors that are determined by visual observation shall be maintained by the Federal Grain Inspection Service, U.S. Department of Agriculture, and shall be available for reference in all inspection offices that inspect and grade rice.

§ 68.307 Milling requirements.

The degree of milling for milled rice; i.e., "well milled," "reasonably well milled," and "lightly milled" shall be equal to, or better than, that of the interpretive line samples for such rice.

§ 68.308 Moisture.

Water content in milled rice as determined by an approved device in accordance with procedures prescribed in the Rice Inspection Handbook 2/. For the purpose of this paragraph, "approved device" shall include the Motomco Moisture Meter and any other equipment that is approved by the Administrator as giving equivalent results 3/.

§ 68.309 Percentages.

Percentages shall be determined on the basis of weight and shall be rounded off as follows:

- (a) When the figure to be rounded is followed by a figure greater than 5, round to the next higher figure; e.g., 0.46, report as 0.5.
- (b) When the figure to be rounded is followed by a figure less than 5, round to the next lowest figure; e.g., 0.54. report as 0.5.
- (c) When the figure to be rounded is followed by the figure 5, round to the nearest even figure; e.g., 0.45, report as 0.4; 0.55, report as 0.6.

All percentages, except for milling yield, shall be stated in whole and tenth percent to the nearest tenth percent. Milling yield shall be stated to the nearest whole percent.

^{3/} Requests for information concerning approved devices and procedures, criteria for approved devices, and requests for approval of devices should be directed to the Federal Grain Inspection Service, U.S. Department of Agriculture, 1400 Independence Avenue, S.W., Washington, D.C. 20250.

Grades and grade requirements for the classes Long-Orain Milled Rice, Medium-Grain Milled Rice, Short-Grain Milled Rice, and Mixed Milled Rice. (See also § 68.315.) GRADES, GRADE REQUIREMENTS, AND GRADE DESIGNATIONS \$ 68.310

the grades from U.S. No. 1 to U.S. No. 6., inclusive; (b) contains more than 15.0 percent of moisture; (c) is musty, or sour, or heating; (d) has any commercially objectionable foreign odor; (e) contains more than 0.1 percent of U.S. Sample grade shall be milled rice of any of these classes which: (a) does not meet the requirements for any of mell milled Requirements Shall be writte | Well milled my be slightly well milled (Minimum) Teasoneb Ly Reasonably 1 Milling Lightly ad 11ed 1 grt ly milled foreign material; (f) contains live or dead weevils or other insects, insect webbing, or insect refuse; or Plates should be used for southern production rice, and sieves should be used for western production rice; but any May be grey or tey be 11ght Requirements tay be dark May be chark or creevy slightly 6 /25 CO. ATEL Color 2 A S rosy 300 108y kernels kernels Percent |Percent | Percent | Percent | Percent | Percent | Percent | Percent broken 1.0 5.0 3.0 2.0 1 1 Phole Bud Other types 10.0 Whole 10.0 8 . ŧ Removed | Removed | Through 2.0 0.5 1.0 sieve 0.1 For the special grade Undermilled milled rice, see § 68.315(d). Grade U.S. No. 6 shall contain not more than 6.0 percent of damaged kernels. Broken kernels by a 6 plate 3.0 1.0 Maximum limits of by a 5 plate 90.0 40.0 1.0 4.0 0.7 or the special grade Parbolled milled rice, see § 68.315(c). device or method which gives equivalent results may be used. These limits do not apply to the class Mixed Milled Rice. 25.0 35.0 50.0 7.0 15.0 Total mediumshort-Chalky kernels 15.0 grain 6.0 8.0 0.01 rice otherwise of distinctly low quality. -Buot 10.0 15.0 2.0 0.9 rain rice Red rice damaged kernels (singly or com-6.0 5/15.0 0.4 (plued) 1.5 and 7 and objectionable damaged kernels 1n 500 Number damaged, and paddy kernels grams Seeds, heatseeds Heat-75 15 25 (singly or (paulqued) 1n 500 Number grams Total 20 30 75 Sample 2 S 9 grade 4 No. No. No. No. No. No. Grade U.S. U.S. U.S. U.S. u.s. U.S. U.S.

23

§68.311 Grades and Grade Requirements for the Class Second Head Milled Rice (See also §68.315)

	Mi mim	Milling Requirements		Well milled	Well milled	Reasonably well milled	Reasonably well milled	Lightly milled	et the requirements more than 15.0 clally objectionabl contains live or therwise of
		Color Requirements 1/		Shall be white or creamy	May be slightly gray	May be light gray	May be gray or slightly rosy	May be dark gray or rosy	U.S. Sample Grade shall be milled rice of this class which: (a) does not meet the requirements for any of the grades from U.S. No. 1 to U.S. No. 5 inclusive; (b) contains more than 15.0 percent of moisture; (c) is musty, or sour, or heating; (d) has any commercially objectionabl foreign door; (e) contains more than 0.1 percent of foreign material; (f) contains live or dead weevils or other insects, insect webbing, or insect refuse; or (g) is otherwise of distinctly low quality.
		Chally kernels 1/	Percent	4.0	6.0	10.0	15.0	20.0	nis class whic S. No. 5 inclu , or heating; ercent of fore ng, or insect
	Red rice and	kernels (singly or combined)	Percent	1.0	2.0	3.0	5.0	10.0	led rice of th. No. 1 to U nsty, or sour re than 0.1 p
Maximum limits of	Seeds, heat-damaged, and paddy kernels (singly or combined)	Heat-damaged kernels and objection- able seeds	Number in 500 grams	Ŋ	10	15	25	70	rade shall be mile grades from U.S. isture; (c) is m (e) contains more other insects, we quality.
M	Seeds, hes and paddy (singly or	Total	Number in 500 grams	15	20	35	50	75	U.S. Sample Grade shall for any of the grades f percent of moisture; (foreign odor; (e) cont dead weevils or other idistinctly low quality.
		Grade		U.S. No. 1	U.S. No. 2	U.S. No. 3	U.S. 110. 4	U.S. No. 5	U.S. Sample Grade

 $[\]underline{1}$ / For the special grade Parboiled milled rice, see §68.315(c).

 $[\]ensuremath{ \text{2/}}$ For the special grade Undermilled milled rice, see §68.315(d).

§ 68.312 Grades an	d Grade Require	ments for the C	lass Screenir	§ 68.312 Grades and Grade Requirements for the Class Screenings Milled Rice (See also § 68.315)	also § 68.315)
	Maximum limits of	imits of			
	Paddy kernels and seeds	s and seeds			Minimum
opeat opeat	Total (singly	Ohientinnshle	Chalky kernels	Color Requirements	Milling Requirements
	combined)	seeds	1/	1/	75
	Number in 500 grams	Number in 500 grams	Percent		
U.S. No. 1 $3/4/$	30	20	5.0	Shall be white or creamy	Well milled
U.S. No. 2 $\frac{1}{3}/\frac{1}{4}/\dots$	22	50	8.0	May be slightly gray	Well milled
U.S. No. 3 $\frac{1}{3}$ / $\frac{1}{4}$ /	125	06	12.0	May be light gray or slightly rosy	Reasonably well milled
U.S. No. 4 3/4/	175	140	20.0	May be gray or rosy	Reasonably well milled
U.S. No. 5	250	500	30.0	May be dark gray or very rosy	Lightly milled
U.S. Sample Grade	U.S. Sample Gruthe requirement (b) contains meating; (d) badly damaged of foreign mating insect webbing	ade shall be mits for any of tore than 15.0 pras any commercor extremely represental; (g) constrain; (g) constrain; (g) constrains or insect ref	lled rice of he grades fr ercent of mc ially object d appearance tains live o use; or (h)	U.S. Sample Grade shall be milled rice of this class which: (a) does not meet the requirements for any of the grades from U.S. No. 1 to U.S. No. 5 inclusive; (b) comtains more than 15.0 percent of moisture; (c) is musty, or sour, or heating; (d) has any commercially objectionable foreign odor; (e) has a badly damaged or extremely red appearance; (f) contains more than 0.1 percent of foreign material; (g) contains live or dead weevils or other insects, insect webbing, or insect refuse; or (h) is otherwise of distinctly low quality.	(a) does not meet No. 5 inclusive; y, or sour, or ; (e) has a than 0.1 percent her insects, inctly low quality.

4/

For the special grade Parboiled milled rice see § 68.315(c). For the special grade Undermilled milled rice see § 68.315(d). Grades U.S. No. 1 to U.S. No. 4, inclusive, shall contain not more than 3.0 percent of heat-damaged kernels, kernels damaged by and/or parboiled kernels nonparboiled` heat in Grades U.S. No. 1 to U.S. No. 4, inclusive, shall contain not more than 1.0 percent of material passing through a 30 sieve.

(See also § 68.315)			Minimum Milling Requirements		Well milled	Well milled	Reasonably well milled	Reasonably well milled	Lightly milled	U.S. Sample Grade shall be milled rice of this class which: (a) does not meet the requirements for any of the grades from U.S. No. 1 to U.S. No. 5 inclusive; (b) contains more than 15.0 percent of moisture; (c) is musty, or sour, or heating; (d) has any commercially objectionable foreign odor; (e) has a badly damaged or extremely red appearance; (f) contains more than 0.1 percent of foreign material; (g) contains more than 15.0 percent of broken kernels that will pass through a 2 1/2 sieve; (h) contains live or dead weevils or other insects, insect webbing, or insect refuse; or (i) is otherwise of distinctly low quality.
§ 68.313 Grades and Grade Requirements for the Class Brewers Milled Rice. (See also § 68.315)			Color Requirements $\frac{1}{1}$		Shall be white	May be slightly gray	May be light gray or slightly rosy	May be gray or rosy	May be dark gray or very rosy	U.S. Sample Grade shall be milled rice of this class which: (a) does not meet the requirements for any of the grades from U.S. No. 1 to U.S. No. 5 inclusive; (b) contains more than 15.0 percent of moisture; (c) is musty or sour, or heating; (d) has any commercially objectionable foreign odor; (e) has a badly damaged or extremely red appearance; (f) contains more than 0.1 percent of foreign material; (g) contains more than 15.0 percent of broken kernels that will pass through a 2 1/2 sieve; (h) contains live or dead weevils or other insects, insect webbing, or insect refuse; or (i) is otherwise of distinctly low quality.
ements for the C	mits of	Paddy kernels and seeds	Objectionable seeds	Percent	0.05	0.1	0.2	١٠٠٥	1.5	U.S. Sample Grade shall be milled rice meet the requirements for any of the grainclusive; (b) contains more than 15.0 or sour, or heating; (d) has any comme (e) has a badly damaged or extremely rethan 0.1 percent of foreign material; (d) broken kernels that will pass throug or dead weevils or other insects, insects of otherwise of distinctly low quality.
nd Grade Requir	Maximum limits of	Paddy kernel	Total (singly or combined)	Percent	0.5	1.0	1.5	3.0	5.0	U.S. Sample Gamet the requirect the requirectors; (toron sour, or he (e) has a bad than 0.1 perce of broken kern or dead weevilis otherwise
§ 68.313 Grades a			Grade		U.S. No. 1 $3/\frac{4}{2}/\dots$	U.S. No. 2 <u>3</u> / 4/	U.S. No. 3 $\frac{1}{3}/\frac{4}{4}/\dots$	U.S. No. 4 $\frac{1}{3}/\frac{4}{4}/\dots$	U.S. No. 5	U.S. Sample Grade

1/ 2/ 3/

4/

For the special grade Parboiled milled rice see § 68.315(c). For the special grade Undermilled milled rice see § 68.315(d). Grades U.S. No. 1 to U.S. No. 4, inclusive, shall contain not more than 3.0 percent of heat-damaged kernels, kernels damaged by heat and/or parboiled kernels in nonparboiled rice. Grades U.S. No. 1 to U.S. No. 4, inclusive, shall contain not more than 1.0 percent of material passing through a 30 sieve. This limit does not apply to the special grade Granulated brewers milled rice.

§ 68.314 Grade Designations.

- (a) The grade designation for all classes of milled rice, except Mixed Milled Rice, shall include in the following order: (1) The letters "U.S."; (2) the number of the grade or the words "Sample grade," as warranted; (3) the words "or better," when applicable and requested by the applicant prior to inspection; (4) the class; and (5) each applicable special grade (see § 68.316).
- (b) The grade designation for the class Mixed Milled Rice shall include, in the following order: (1) The letters "U.S."; (2) the number of the grade or the words "Sample grade," as warranted; (3) the words "or better," when applicable and requested by the applicant prior to inspection; (4) the class; (5) each applicable special grade (see § 68.316); (6) the percentage of whole kernels of each type in the order of predominance and when applicable; (7) the percentage of broken kernels of each type in the order of predominance; and (8) the percentage of seeds and foreign material.

NOTE: Broken kernels other than long grain, in Mixed Milled Rice, shall be certificated as "medium or short grain."

SPECIAL GRADES, SPECIAL GRADE REQUIREMENTS, SPECIAL GRADE DESIGNATIONS

§ 68.315 Special grade and special grade requirements.

A special grade, when applicable, is supplemental to the grade assigned under § 68.314. Such special grades for milled rice are established and determined as follows:

- (a) Coated milled rice. Coated milled rice shall be rice which is coated, in whole or in part, with substances that are safe and suitable 4/ according to commercially accepted practice.
- (b) Granulated brewers milled rice. Granulated brewers milled rice shall be milled rice which has been crushed or granulated so that 95.0 percent or more will pass through a 5 sieve, 70.0 percent or more will pass through a 4 sieve, and not more than 15.0 percent will pass through a 2½ sieve.
- (c) Parboiled milled rice. Parboiled milled rice shall be milled rice in which the starch has been gelatinized by soaking, steaming,
- 4/ Compliance with the provisions of these standards does not excuse failure to comply with provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal Laws. Safe and suitable is defined in the regulation issued pursuant to the Federal Food, Drug and Cosmetic Act at 21 CFR 130.3(d).

and drying. Grades U.S. No. 1 to U.S. No. 6, inclusive, shall contain not more than 10.0 percent of ungelatinized kernels. Grades U.S. No. 1 and U.S. No. 2 shall contain not more than 0.1 percent, grades U.S. No. 3 and U.S. No. 4 not more than 0.2 percent, and grades U.S. No. 5 and U.S. No. 6 not more than 0.5 percent of nonparboiled rice. If the rice is: (1) Not distinctly colored by the parboiling process, it shall be considered "Parboiled Light"; (2) distinctly but not materially colored by the parboiled process, it shall be considered "Parboiled"; (3) materially colored by the parboiling process, it shall be considered "Parboiled Dark." The color levels for "Parboiled Light," "Parboiled," and "Parboiled Dark" shall be in accordance with the interpretive line samples for parboiled rice.

NOTE: The maximum limits for "Chalky kernels," "Heat-damaged kernels," "Kernels damaged by heat," and the "Color requirements" in § § 68.310, 68.311, 68.312, and 68.313 are not applicable to the special grade "Parboiled milled rice."

(d) <u>Undermilled milled rice</u>. Undermilled milled rice shall be milled rice which is not equal to the milling requirements for "well milled," "reasonably well milled," and "lightly milled" rice (see § 68.307). Grades U.S. No. 1 and U.S. No. 2 shall contain not more than 2.0 percent, grades U.S. No. 3 and U.S. No. 4 not more than 5.0 percent, grade U.S. No. 5 not more than 10.0 percent, and grade U.S. No. 6 not more than 15.0 percent of well-milled kernels. Grade U.S. No. 5 shall contain not more than 10.0 percent of red rice and damaged kernels (singly or combined) and in no case more than 6.0 percent of damaged kernels.

NOTE: The "Color and milling requirements" in §§ 68.310, 68.311, 68.312, and 68.313 are not applicable to the special grade "Undermilled milled rice."

§ 68.316 Special Grade designation.

The grade designation for coated, granulated brewers, parboiled, or undermilled milled rice shall include, following the class, the word(s) "Coated," "Granulated," "Parboiled Light," "Parboiled," "Parboiled Dark," or "Undermilled," as warranted, and all other information prescribed in § 68.314.



